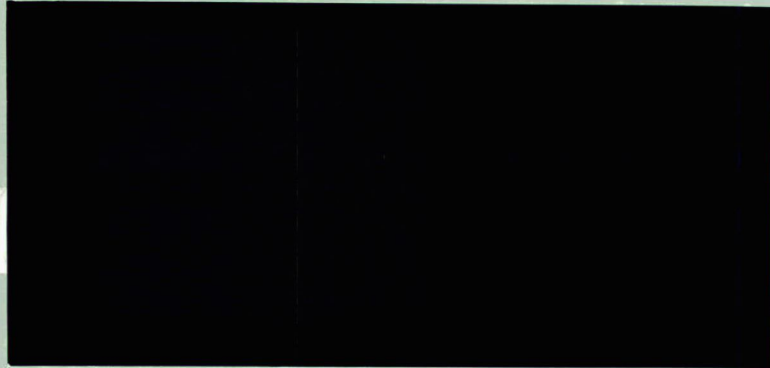


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EDUCATION

AN ANALYSIS OF THE CARNEGIE UNIT,
THE EXISTING VARIATIONS WITHIN
SECONDARY SCHOOLS OF ALBERTA
AND THE FEASIBILITY OF
CHALLENGE TESTS

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- by -

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December 1980

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CHAPTER I

INTRODUCTION AND BACKGROUND

Purpose of the Study

The purpose of this study is to review briefly the origin of the Carnegie Unit concept and its influence upon the organization of high school programs; the establishment of criteria for the high school diploma; the Alberta high school credit system and diploma requirements in relation to the Carnegie Unit; the existing variations, ambiguities or inconsistencies within the Carnegie Unit in Alberta secondary schools; and the feasibility of the use of challenge tests in Alberta high schools.

Origin of the Carnegie Unit and Its Influence on Secondary Schools

The Carnegie Unit has been for many years the primary method of measuring the progress of students from high school entrance to graduation. Curricular programs, organization for instruction and the high school diploma are based on the Carnegie Unit. Initially, the Carnegie Unit concept emerged in the United States in response to a perceived need to improve vertical articulation between high school and college and also to overcome the lack of common or uniform standards of time allotments for high school courses and programs. Prior to the introduction of the Carnegie Unit, when schools offered only such time-honored basic subjects as English, mathematics and chemistry, for example, and assigned approximately 120 hours of study per year for their completion, the term "subject"

was well understood, both as an indicator of content and as a rough measure of effort and time spent by the student in the study of a subject. In the course of time, however, more subjects were added to the high school curriculum. Some of these were called electives and were considered to be either of lesser importance or, perhaps, contained a less comprehensive and reduced course content. Hence, they were often assigned a shorter minimum time requirement for completion, that is, less than 120 hours. This created some problems. In one high school, a pass mark in one of these subjects might represent 60 or 75 hours of class time, while in another, it might represent an intensive study of a more comprehensive course content, requiring at least 120 or more hours. There was a lack of uniform standards of quality and time allotments in these subjects from one school to another.

These variations caused considerable confusion and it became increasingly more difficult to use the term "subject" as a rough standard measure of the time and effort required of a student to achieve a pass in a subject. This was particularly true in the United States where many colleges accepted the high school diploma as the chief admission requirement into their institutions. Colleges had no way of evaluating a student's record or diploma except by checking with the high school attended in order to find out how much time and effort had been devoted to the study of a subject by a student in order to achieve a pass and fulfill the requirements for a high school diploma. In order to bring some order and uniformity into a confused system of reporting student achievement, the Carnegie Foundation in 1906 adopted, as the criterion of a high school, a recommendation from the Association of Teachers of New York and Vicinity. The latter introduced, for the first time, the use of the new term "unit" or

"unit-of-credit" and stated that in determining academic standards of high schools, fourteen points or units shall be accepted as an equivalent of a high school program; "a unit signifying a course of five recitations weekly throughout an academic school year" (Savage, 1948).

Since 1906, secondary schools in the United States, state departments and accrediting agencies adopted the unit-of-credit or Carnegie Unit both as a guide for developing courses and programs and as a standard of quality for programs. In time, the Carnegie Unit became an evaluative criterion. For a student to proceed through high school, he had to earn credits expressed in units. To obtain a diploma, itself an expression of assumed quality, the student had to earn a minimum number of credits over a period of four years or less.

The Carnegie Unit was finally defined concisely and accepted nationally in the U.S. in 1909 (Roush, 1970). The fundamental concept inherent in The Carnegie Unit is that the amount of time (hours) spent in the classroom in the study of a subject is a justifiable criterion for the evaluation of a student's high school work. In other words, achievement is evaluated in terms of the time spent in study rather than in terms of the quality of learning, although, in actual practice, both time and satisfactory achievement are used as criteria for evaluation. The definition stated that a unit represents a year's study in any subject in a high school. Instruction is offered for one class period per day, five days a week, thirty-six to forty weeks per year (one school year) and a student must earn fourteen to sixteen units in four years of high school in order to graduate with a high school diploma. A satisfactory year's work in any subject required a minimum of one hundred and twenty hours of instruction or the equivalent. Schools organized on any other than a four year basis,

such as the three year plan used in Alberta for example, can also estimate their work in terms of the Carnegie Unit (Baker, 1980). In the course of time, the graduation requirement for most high schools in the United States was defined in terms of this unit and colleges set their admission requirements on the basis of these units.

Most provinces in Canada have been influenced by the Carnegie Unit, although no province has adopted the concept in its entirety. Most provinces have a specified minimum time component as well as an achievement component for the completion of a unit of study, regardless of whether that unit is referred to as a unit-of-study, a credit or simply as a subject.

The Carnegie Unit, either in its original form, or in any of its modifications, has never assumed as much importance in Canada as in the U.S.A. from the standpoint of establishing eligibility for university entrance requirements. Faculties in Canadian universities usually require a high school diploma with senior matriculation standing but, more important, they specify minimum standing in certain required subjects which are presumably related to the university program to be followed by the student (Warren, 1975).

The Alberta Credit System

The credit system was introduced into Alberta high schools in 1937 and phased in over a three year period from 1937 to 1940. It was at the beginning of this period that the school program was organized into the 6-3-3 system; i.e. grades 1 through 6 were designated as elementary, grades 7 through 9 were called intermediate grades, which later became junior high school, and grades 10 through 12 became senior high school. At the same time, departmental final examinations were eliminated in grade 8 and intro-

duced in grade 9, discontinued in grades 10 and 11 but retained as mandatory finals in grade 12.

Some of the main features of the Alberta credit system included the following:

1. The numbering system of high school courses was changed so that eventually all courses were numbered in decades. Numbers 10 to 19 were grade 10 courses (e.g. English 10, Science 11, Mathematics 13); numbers 20 to 29 were grade 11 courses (e.g. Social Studies 20, Music 21, English 23); and numbers 30 to 39 were grade 12 courses (e.g. Mathematics 31, Typewriting 30, Music 31).
2. A school day consisted of eight class periods, each of approximately 40 minutes duration; thus, 40 periods per week were available for instruction.
3. A subject carried as many credits as the number of class periods per week in which instruction was offered.
4. Most subjects carried five credits. However, some courses had variable credit value. For example, Physical Education 10 could be offered for two, three, four or five credits.
5. A minimum of 100 credits was required to qualify for a High School Diploma. A student could complete the high school program in three years by earning approximately 35 credits per year.
6. Certain subjects, namely English, Social Studies, Health and Physical Education (in grade 10 only) were compulsory for every student.
7. Senior matriculation requirements for university entrance were to be determined through joint consultation by the Department of Education and the Faculty Committee of the University of Alberta.

Since the introduction of the credit system in Alberta high schools in 1937, a number of changes and modifications has occurred. Some of the more significant ones include the following:

1. The departmental final examinations in grade 9 subjects, which had been used as criteria for promotion into grade 10, were terminated in 1969 and replaced by a General Achievement Test Battery.
2. The Grade 9 General Achievement Test Battery was discontinued in 1973.
3. Mandatory grade 12 departmental final examinations were terminated in 1973 and accreditation of local high schools was introduced; this allowed teachers to assign the final grades in all courses. Departmental finals (appeal examinations) remained only for special purposes such as: satisfying student appeals, improving a final grade, scholarship purposes and for adult students wishing to obtain high school credits.
4. Most high schools adopted the semester system.
5. Departmental approval was more readily given to courses where the curriculum was locally developed at the school system level.
6. Many new courses, designed to meet the varied interests and needs of students, particularly in the vocational areas, were added to the high school program. Included also were such courses as Work Experience and Special Projects.

Alberta secondary school programs in junior and senior high school are based on both an achievement component and a time component. Satisfactory achievement is determined by the teacher. The time component is determined as prescribed minimum time allotments (hours of instruction) either by subject, as is the case in junior high school, or by credits in senior high school grades. In a discussion paper prepared for the Curriculum Policies Board (Revised, 1977) entitled, "Alberta Education and Diploma Require-

ments," it is reported that these time allocations have been based partly on: (a) past experience and tradition; (b) studies done on how much students can achieve in specified time blocks; and (c) on the assumption that a systematic approach and a structured course content will increase learning efficiency.

The credit system is not used in junior high school. The subjects in the junior high school program fall into three categories:

1. Core Subjects (Compulsory). The minimum time allotments (hours per course) shall be:

Language Arts	150
Mathematics	100
Physical Education and Health	75
Science	100
Social Studies	100
Group Guidance (Grade IX)	25

2. Group A Options (Cultural and Practical Arts). Course outlines are provided. The minimum time allotment for each option should be 75 hours.

3. Group B Options (General Electives). Course outlines are not provided. The minimum time allotment for each option should be 50 hours (Junior-Senior High School Handbook, 1980-81). In Group A and B options, the minimum time allotments are recommended.

In effect, the junior high school program, with its minimum time allotments for courses, is based on a modified Carnegie Unit concept.

In the credit system in Alberta high schools, the time-credit relationship is quite explicit. Regardless of whether a school is organized on a quarter, semester, trimester or 10-month basis for instructional purposes, it is required that a total of at least 25 hours per credit be

scheduled for purposes of instruction, examinations and other student activities directly related to the course for which credit is to be granted. Staff meeting days or those used for professional development, conventions or similar activities where students do not receive instruction, are not to be included in the 25 hours per credit allocation (Junior-Senior High Handbook, 1980-81, p. 13). Thus, a five-credit course must receive a minimum of 125 hours of instruction time. This represents approximately one 40-minute period per day, five days per week for each week of the school term (assuming a ten month school year). In order to fulfill this requirement, 187.5 instructional days would be required. Three-credit courses shall receive not less than 62.5 hours of instructional time. In semestered high schools, this simply means doubling the instructional time in each course. A school may provide more than minimum time for any course.

Five credits represents a year's study in an average subject. In many core subjects, a student must follow a sequence (e.g. English 10, 20, 30 or Mathematics 13, 23, 33) and comply with the minimum time requirements in order to earn 15 credits over a three year period and qualify for graduation. As a general rule, instruction in second and third year courses may not be taken unless a student has earned credits in the prerequisites with at least a "C" standing. Normally, prerequisites may not be waived by the principal, except under special circumstances. Credits are not granted for courses which have been waived. Regular attendance at school makes a pupil eligible to receive credits. Minimum attendance requirements are set by the principal (subject to the approval of the school board) who may withhold his recommendation for credits if a students' attendance falls below an acceptable standard (Junior-Senior High School Handbook, 1980-81).

The High School Diploma

The High School Diploma is an official document issued by Alberta Education certifying that the holder has completed a prescribed program of instruction at a high school or through correspondence instruction under the direction and supervision of Alberta Education. The diploma does not necessarily grant admission to post-secondary educational institutions. These institutions set their own entrance requirements.

A High School Diploma is awarded to a student holding one hundred credits, subject to the following requirements:

- a. Language Arts. A minimum of fifteen credits, five of which must be in English 10 or 13 and five in English 30 or 33.
- b. Social Studies and Social Sciences. A minimum of ten credits, five of which must be in Social Studies 10. A maximum of 18 credits may be earned in the Social Science options.
- c. Physical Education 10. A minimum of two credits.
- d. Mathematics. A minimum of five credits with a maximum of: (i) ten credits in Grade X, and (ii) fifteen credits in Grade X and XI courses.
- e. Science. A minimum of three credits.
- f. Grade XII courses - English 30 or 33 (or 36 if completed prior to September, 1974), plus a minimum of ten other credits at this level.

Credits earned in other approved high school courses may be used to obtain the required one hundred credits (Junior-Senior High School Handbook, 1980-81). It is readily seen that, in Alberta high schools, the credit system and the requirements for a High School Diploma are based on the Carnegie Unit concept with the time component being a major criterion

both in the definition of a credit and in the number of years of schooling required to obtain a diploma.

CHAPTER II

VARIATIONS IN THE TIME-CREDIT RELATIONSHIP APPROVED BY THE PRINCIPAL

The Junior-Senior High School Handbook (1980-1981) defines the minimum time requirements for subjects in junior high school and for credits in senior high school. However, an analysis of the Handbook reveals that there are variations in time commitments by which students may earn credits when they are approved or endorsed by the principal. These do not necessarily adhere to the strict definition of time requirements as prescribed in the Handbook.

The following outlines some of the variations which apply to both junior and senior high school students in regular attendance at school.

Credits Earned When Time Requirements are Recommended But Not Mandatory

In both junior and senior high school, some courses have a recommended minimum number of hours of instruction but this is not a mandatory provision in the Junior-Senior High School Handbook (1980-1981).

At the junior high school level, it was outlined earlier that Group A options are recommended for a minimum of 75 hours of instruction while Group B options are recommended for a minimum of 50 hours. It is not unusual to find some schools offering these options for less than the recommended times. Since the Handbook (p. 9) states that the recommendations concerning options are strongly encouraged but not mandatory, some

principals may be tempted to interpret this very broadly and limit the option program, both in time and in content. Thus, students may be deprived of the opportunities to enhance their knowledge and interest in cultural, practical and academic subjects.

In some instances, compulsory subjects, where the minimum time allotment is mandatory, receive less than the required number of hours of instruction. A classic example of this is Grade 9 Group Guidance, which must be offered for a minimum of 25 hours. Far too often, it has been discovered that instruction in Grade 9 Guidance is almost completely neglected, even though it may appear on the school's timetable.

Health is another example. Since it is combined with Physical Education in terms of time allotment, periods, which should be scheduled for Health, are often used for Physical Education classes.

At the high school level, students may earn three or five Special Project Credits in any one semester on the recommendation of the principal. Thus, a total of fifteen credits may be earned in grades 10, 11 and 12. Again, it is recommended but not mandatory that a project qualifying for three credits should represent approximately 75 hours of work, while five credits should represent approximately 125 hours of work (Handbook, p. 25). Since projects usually consist of individual student activities, it is often very difficult to provide adequate supervision and control over the actual number of hours devoted to a project by the student. Thus, students are able to earn Special Project credits without necessarily meeting the recommended minimum time requirements.

A similar situation may occur in Work Experience programs in some cases, even though here, it is mandatory that, to qualify for five credits, the work experience shall be of at least 125 hours duration. Lack of ade-

quate supervision and program monitoring on the part of the teacher-coordinator sometimes makes it difficult to ascertain accurately whether students are devoting the required minimum number of hours to the job. Yet, full work experience credits are, nevertheless, being granted to students.

Credits Earned When Time Requirements Are Less Than Those Specified in the Definition of a Credit

Some school systems offer extension programs in basic education. The Handbook (p. 14) states that senior high school extension courses must be instructed for at least 13 hours per credit or be a three-credit course instructed for at least 32.5 hours. Thus, the number of required hours of instruction in extension courses actually represents one half of the defined credit time required in courses offered in the regular high school program. Where extension courses are offered in a school, it is possible for a regular high school student to register in such classes and earn high school credits. No limitation is placed on the number of credits which may be earned in this fashion, although the student's program would have to be approved by the principal.

There is also the situation wherein the principal may schedule two three-credit courses for five 40-minute periods per week. The number of hours of instruction offered in each course is less than the minimum required by definition, which states that three-credit courses shall receive not less than 62.5 hours of instructional time (Handbook, p. 13). Yet students are granted three credits for each course.

Section 4 (Special Circumstances) of the Handbook (p. 14) makes provisions for enhancing the learning opportunities for students whose programs may be restricted because of special circumstances. The guidelines state

that flexibility in scheduling of courses and in timetabling instruction may be facilitated by reducing, if necessary, the instructional time requirements from 25 hours per credit. Double programming may also be used, whereby, not more than two sequent or alternative courses (e.g. Mathematics 10, 20; Mathematics 10, 13) may be offered in the same period. In both of these cases, students may earn credits through reduced time requirements. Admittedly, both of the above provisions must be approved by the Regional Office Coordinator and approval is given only in exceptional circumstances. Nevertheless, the possibility does exist for some students to earn credits under these provisions.

Credits Granted for Work Over Which There is No Time Control

In junior and senior high school, students may be granted standing or credits for private music study over which the school exercises no direct supervision. In junior high school, a grade 9 student may be granted the equivalent of full grade 9 standing in music if he or she possesses a certificate of achievement as outlined in the chart for private music study provided in the Handbook (p. 12). The student can thus be excused from taking Music 9, a Group A option. In senior high school, a student may be granted up to 15 credits for private music study in accordance with the achievement levels outlined in the chart on page 24 of the Handbook. It should be noted that credits for music taken by private study are recommended by the principal and may be granted retroactively or in advance of the grade in which the student is enrolled. In other words, a student, who possesses certificates of achievement equivalent to Music 30 or 31, is granted credits not only for music in grade 12 but also for the prerequisites, i.e. Music 10 or 11 and Music 20 or 21. Oddly enough, this provi-

sion does not apply to other high school courses. Where normal prerequisites are waived by the principal, credits are not granted for courses which have been waived (Handbook, p. 20). For example, in the case of Second Languages, students who have shown proficiency in French and have successfully completed French 21, may be recommended for credits in French 30. However, no credits will be granted for both French 21 and French 30 unless instruction was received in both (Handbook, p. 28). In this case, the minimum time requirement of 125 hours of instruction for five credits is rigidly enforced.

Correspondence school courses are available to both junior and senior high school students. Students under 16 years of age who wish to register for correspondence courses must have the official approval of the principal. It is also recommended that all high school students obtain such approval. Notwithstanding this recommendation, all grade 12 students and students in grades 10 and 11 who are 16 years of age and over, have the option of submitting an application for any school subject for which they hold the prerequisite, without the principal's signature (Handbook, p. 15). All students in grades 10, 11 and 12 may also apply for correspondence school summer courses without the principal's official signature. The important issue here is that there are no mandatory or minimal time requirements for credits earned through correspondence school courses. Thus, students are able to earn credits for course work over which there is no time control and students are not forced to abide by the time-credit relationship which is defined for courses taken in the regular classroom.

CHAPTER III

VARIATIONS IN THE TIME-CREDIT RELATIONSHIP REQUIRING APPROVAL OF REGIONAL OFFICE COORDINATORS

The 1980-1981 Handbook states on page 6 that:

Special or unusual circumstances relative to the secondary school organization are to be reported and explained by the principal on the Form A in the space provided for the consideration and approval of the Regional Office Coordinator.

Under this section, variations from the mandatory requirements, as set out in the Handbook, may be approved.

In March 1980, the Planning and Research Branch of Alberta Education sent a questionnaire to all Regional Office Coordinators requesting them to provide information on both the nature of the variations existing in the standard 25 hours of instruction per credit unit and the criteria used in resolving any issues concerning such variations. In essence, Regional Office Coordinators were asked to respond to the following:

1. What variations have you approved in cases where such approval is required, such as double programming, for example, and what criteria were employed in making a decision?
2. Have you exercised any control over the nature of the program or the hours allocated in cases where there is a recommended, but not required, time element, such as junior high school Group A and B options, and what criteria were applied in resolving these matters?

3. Have you or the Regional Office Consultants, through school visits, evaluations or other means, noted any unapproved variations and, if so, what action was taken in such cases?

Summary of Responses of Regional Office Coordinators to Questionnaire

The following represents a summary of the responses to the questionnaire by the Regional Office Coordinators. A copy of the questionnaire is included in Appendix A.

Junior High School Core Subjects: Regulatory Provision (Handbook, Section II)

All Regional Office Coordinators reported cases of junior high schools offering less than the required minimum time for one or more of the compulsory core subjects. The estimated percentage of schools involved in such practices range from 1 per cent to 20 per cent with a mean of approximately 9 per cent.

The core subjects primarily involved in such cases, listed in descending order of frequency, were: Group Guidance 9, Health and Physical Education, Social Studies and Science.

Steps taken by the Coordinators in such cases were based on both specified criteria, i.e. the regulations in the Handbook and on an ad hoc basis, depending upon the circumstances. In those cases where flagrant violations occurred, the Coordinator refused to approve the Form A.

The Form A is the Secondary School Registration and Continuing Accreditation Document sent by Alberta Education to all schools in which junior and/or senior high school grades are taught. These forms show both junior and senior high school organization and operation for the school year in

accordance with detailed instructions. The Form A must be completed at the beginning of each school year by the principal, endorsed by the superintendent and forwarded to the appropriate Regional Office of Education for approval. Alberta Education accepts recommendations for credits only when the Form A has been properly completed, the school has complied with the departmental requirements relative to accreditation and the program, as shown on the Form A, has been approved by the Coordinator of the Regional Office of Education.

When approval is not granted, the principal is advised to abide by the regulations and make the necessary changes. When this is done, the Form A is then approved. It was reported, however, that when the necessary changes had been made on the Form A by the principal, it was difficult to ascertain whether the required changes were actually being implemented in the school program since there was no way of ensuring that this was done. Some Coordinators meet with superintendents, principals and teachers in order to discuss the Handbook and encourage them to abide by the regulations. In some cases, exceptions to the regulations are approved. This applies particularly in the case of Hutterite Colony schools and small private schools. Reasons given included: religious beliefs of parents, limited or lack of adequate facilities (e.g. for Physical Education) and because teachers did not have sufficient time to teach all subjects in grades 7, 8 and 9 in a one-room school.

Junior High School Options

All coordinators indicated that there were departures from the recommended minimum of 75 hours for Group A options and 50 hours for Group B

options. The estimated percentage of schools involved in this practice varied from 10 per cent to 50 per cent with a mean of 27 per cent.

Departures from minimum time allotments were reported about equally for A and B options. Schools often semester these options in 40 or 80 minute blocks of time. Utilizing these times, Group A options are thus offered for approximately 63 hours, instead of the recommended 75 hours. In some cases, however, A options are scheduled for three 40-minute periods per week which exceeds the suggested minimum.

Group B options are also offered in 40 or 80 minute blocks of time. Some schools frequently schedule two or three mini-courses within one B option. Times are generally satisfactory, with some being slightly under the suggested 50 hours, while others are over.

Action is generally taken by Coordinators when there is a large difference in times from the suggested 50 hours or 75 hours; then the principal is asked to increase the number of hours. It was reported that, in some schools, a B option may be scheduled for 100 to 125 hours. This practice is unacceptable and the principal is advised to make immediate changes or the Form A will not be approved. Any actions taken by Coordinators are usually on an ad hoc basis because the Handbook is not definitive on Options A and B times--these are recommended times and not mandatory. Hence, one can expect all kinds of deviations and variations. One Coordinator suggested that "the present Handbook, as written, makes the option program itself optional."

Senior High School Time-Credit Relationship: Regulatory Provisions and Special Circumstances

Coordinators indicated that they exercised authority over all matters pertaining to Special Circumstances (Handbook, Section 4, pp. 14-15), when

these were identified on the Form A. Coordinators generally insist that, whenever possible, schools adhere to the regulations insofar as the time-credit relationship is concerned. They insist that schools schedule no less than 25 hours per credit and that a three-credit subject receive 62.5 hours of instruction. Cases in which they have intervened and have not approved the Form A include the following:

1. Violation of the regulations pertaining to the defined time-credit relationship.
2. Combination of unlike courses in double programming.
3. Combination of more than two courses in the same period.
4. Timetables which do not show the required number of hours or periods of instruction for each course.
5. Excessively high enrolment in a class.
6. Unacceptable practices related to Special Project Credits.

The Form A's are not approved until the required changes have been made by the principals.

In some cases, however, exceptions were made. Two Coordinators indicated that double programming is permitted if a sensible reason is provided (e.g. a student's program is restricted).

Interventions by the Coordinators have been made on the basis of the regulations in the Handbook as well as on an ad hoc basis. Methods of intervention or steps taken by Coordinators include:

1. Informing principals and superintendents directly that the regulations are to be followed.
2. Meeting with principals' associations and superintendents every spring and enunciating the expectations of the Regional Office Coordinator.

3. Developing a checklist for principals and superintendents to use in preparing and approving the Form A at the local level (expectations are listed in the checklist) before submitting them to the Regional Office.
4. Assigning a Regional Office Consultant to work directly with two or three school systems, thus providing direct contact and assistance in the preparation of the Form A's.
5. Planning, in the future, to meet with each superintendent in his office to review all Form A's before they are submitted to the Regional Office for approval.

Most Coordinators indicated that they were aware of program variations which had not been submitted for approval on the Form A. These were usually discovered during school evaluations or during school visits by Consultants and reported accordingly.

The nature of such variations include the following:

1. Students were being granted fewer credits in variable credit courses because of either poor attendance or low achievement; e.g. Physical Education 10 was offered for five credits but the student was awarded only three credits.
2. In cases of double programming, instruction was usually given in one course only but credits were awarded in the other to students who achieved poorly; e.g. where English 10-13, English 20-23, Mathematics 10-13 or Mathematics 20-23 were offered in the same period, the 10 or 20 level program was taught but students were awarded credits in the 13 or 23 level course.
3. Time allocations indicated on the Form A were often different from what was observed in actual practice in the school.

4. Physical Education 9, 10 and 20 were scheduled in the same period but only one program was offered, such as games, for example.
5. Special Projects Credits were being offered as a type of work experience; i.e. as library aides, tutors, office clerical work, etc.
6. Physical Education being listed for three, four or five credits on a student's program but the student does not attend the required number of periods or classes per week; this enables him to take another course which was in conflict with Physical Education on the timetable.
7. Students being awarded credits in Music 11, 21 and 31 for private music study and then being registered in Special Projects for credits when, in fact, the students were taking band (i.e. Music 11, 21, 31).

When variations such as those listed above were encountered, Coordinators used various measures to rectify the situations. These included the following:

1. Reported variations in school evaluation reports and discussed them with school administrators and the Board.
2. Discussed such cases at teacher workshops, principals' meetings and superintendents' association meetings, pointing out the fact that these practices are dubious, if not illegal.
3. Informed the principal and superintendent immediately and advised them to discontinue such practices.
4. Sent out Regional Office Consultants to the school to investigate.
5. Refused to approve the Form A until necessary changes were made satisfactorily.

One Coordinator expressed concerns about the fact he was not absolutely certain whether his interpretation of an issue or a variation was

correct. He was also not certain whether anyone would support him if his interpretation and/or decision for action was ever seriously challenged.

Additional Concerns

The questionnaire asked the Coordinators to express any additional concerns about the time-credit relationship. These are presented below:

1. There is no way of verifying the time actually provided in each course to ensure that a five-credit course receives 125 hours of instruction.
2. Some schools change a Group A option to a Group B option in order to offer it for fewer hours than the recommended 75.
3. Few schools could sustain a rigorous audit of their time-credit relationship. The instructional year has been shortened to 188-190 days or less. There is really no exact picture of the number of days teachers actually offer instruction to students. School systems do not account for the instructional time lost during the school year. Loss of instructional time is caused by the following factors:
 - a. staff meetings held during school time;
 - b. some schools operate on 66-minute periods rather than the usual 80 minute time blocks for semestered subjects; thus, a five-credit subject receives 396 minutes of instruction per week which is less than the required minimum of 400 minutes;
 - c. the Board may declare an unanticipated holiday;
 - d. pupil registration days are counted as instructional days;
 - e. buses deliver students home at 11:00 a.m. on the day prior to the Christmas vacation;
 - f. schools schedule as many as six examination days at the end of

each semester; which, although legal, seems rather excessive; some also schedule days for mid-semester examinations;

g. parent-teacher interview days are counted as instructional days;

h. some schools schedule football games or other sports activities during school time;

i. student union activities and other non-instructional school activities occur during school time, e.g. assemblies, concerts, dances, visiting speakers, films, world series, etc.;

j. open house during Education Week results in loss of instructional time;

k. increase in the number of professional development and in-service days for teachers;

l. school closure due to inclement weather;

m. emergency school closures, e.g. frozen water pipes, furnace breakdown, fire, etc.;

n. teacher strikes.

4. There are many different interpretations as to what constitutes instructional days.

5. There should be some logic associated with the time-credit relationship. Does a credit demand 25 hours per credit, 20.8 hours, 13 hours or 10.8 hours? All of the above are possible depending upon the organization of the program.

6. The semestering of core subjects at the junior high school level should be prohibited. This practice makes the junior high school a poor copy of the senior high school. It causes problems for transfer students in that they miss a portion of a course or even a whole subject. Class periods (80 minutes) are far too long for junior high school students.

7. Retain the present definition of a credit for the time requirement.

It is the only factor which is maintaining some semblance of order in our present system.

The responses of the Regional Office Coordinators to the questionnaire provide us with much valuable information. Their concerns should not be taken lightly. Perhaps the time has come for a complete re-examination of the Junior-Senior High School Handbook, the Form A and the time-credit relationship with all its existing variations.

CHAPTER IV
OTHER FACTORS AFFECTING THE
TIME-CREDIT RELATIONSHIP

Loss of Credits Through Irregular Attendance

The Junior-Senior High School Handbook (pp. 17-18) states that regular attendance at school makes a pupil eligible to receive credits for a full year's work. Minimum attendance requirements are set by the principal who may withhold his recommendation for credits if a student's attendance falls below an acceptable standard. Attendance policies vary from one school to another. Some schools adopt a reasonable flexible approach to attendance, while others enforce attendance rules and regulations with great exactitude and dedication. In the latter schools, students are sometimes unjustly penalized under the attendance policy when credits are withheld. A student may be granted only three or four credits instead of five in a course because of irregular attendance. The result is that, at the end of grade 12, when the student is expecting to graduate with a High School Diploma, he realizes that he has only earned 97, 98 or 99 credits and so is unable to qualify for the diploma. This means that he must either repeat or take a course through summer school or by correspondence in order to earn the required 100 credits for a diploma. This does create undue hardships for some students and, more often than not, they become so discouraged that they simply drop out.

Irregular attendance may also result in a reduction of a grade or standing in a subject. As a consequence, this may lead to either a loss of prerequisite standing or a loss of credits in a course. Some schools use a carefully designed formula or chart (based on days absent and/or classes missed) to calculate the number of percentage points by which a student's mark may be reduced for irregular or unacceptable attendance. A student's performance or achievement in class work or on tests, which may be quite satisfactory, is of little significance when the formula is rigidly applied. As an example, a student with a 55 per cent average in a subject might earn a final mark of 47 per cent (a "D" standing). A "D" standing earns him credits but does not give him prerequisite standing. At least a "C" standing (50 per cent or over) is required in the prerequisites in order to take instruction in second and third year courses (Handbook, p. 20).

Similarly, a student with a 40 or 42 per cent average could receive a final mark of 35 per cent (an "F" standing) and earn no credits in a course.

Attendance is directly related to the Carnegie Unit concept in that the time factor is predominant. The major criticism of the Carnegie Unit is that it emphasizes the evaluation of a student's high school work in terms of how many hours and years he puts into the study of a subject, rather than in terms of the amount of knowledge acquired, competence, needs, interests and ability. Individual differences are largely ignored. The Carnegie Unit assumes that all students can acquire the same amount of learning or subject mastery in a given period of time. For some students, it should not be necessary to be in attendance in all classes every day. For others, more instructional time in a particular subject might be

required every day. It would seem then that the Carnegie Unit, when strictly enforced, in terms of attendance regulations, does a disservice to many students. Students would probably benefit more if the guidelines in the Handbook relating to attendance were revised so as to deny principals the authority to withhold credits on the basis of irregular attendance.

Loss of Credits Due to Other Factors

Students may also find themselves lacking one, two or three credits of the required 100 because of other factors or circumstances over which they may have had little, if any control. These include the following:

1. The student may have failed a three-credit course but is unable to repeat it or substitute another course because of time table limitations or conflicts.
2. Lack of adequate assistance and advice in student program planning by the principal and/or guidance counsellor (a common complaint of high school students).
3. A student may have been given inadequate or erroneous information about course requirements leading to the High School Diploma.
4. Reluctance on the part of some principals to recommend or approve correspondence school courses.
5. Use of inflexible timetables with little, if any, provision made for modifications in order to accommodate students having serious timetable conflicts.
6. Limited program offerings in small high schools.
7. Some lack of familiarity with the contents of the Junior-Senior High School Handbook (i.e. regulations, guidelines, requirements, etc.) on the part of new or inexperienced principals and/or guidance counsellors which

could lead to misinterpretations affecting student programs (some counsellors and many teachers are almost completely unfamiliar with the Handbook).

Guideline 1 under Special Circumstances in the Handbook (pp. 14-15) states, in part, that priority should be given to offering a program which enables students to meet diploma requirements, to earn about 35 credits per year and to enter post-secondary institutions or to obtain employment. These are worthy objectives but it would seem that they fall somewhat short in meeting the needs of those students who are unable to meet diploma requirements because they lack one, two or three credits. There is no provision in the Handbook for dealing with these cases under Special Circumstances. Perhaps there should be a guideline which would give the principal the authority to recommend to the Special Cases Committee that a student in such circumstances should be granted sufficient unassigned credits to qualify for the High School Diploma.

The Special Cases Committee deals with about two dozen or so such cases every year. These are written appeals submitted by students who require a diploma in order to gain employment or to be accepted for some kind of pre-employment training, such as in the City Police Force, for example. Where an appeal is substantiated, the student is granted one, two or three unassigned credits as required, and receives the High School Diploma. Some students apparently know that appeal procedures in such cases are available but this is not common knowledge. Most students and principals are not aware of this. Perhaps such information should be spelled out clearly in the Junior-Senior High School Handbook.

Length of Instructional Year

The length of the instructional year in Alberta schools is directly related to the Carnegie Unit and the time-credit relationship. There are some concerns about the instructional year because it lacks a clear-cut definition. Wide variations exist in the interpretation of that which constitutes the instructional year and, hence, the total number of actual instructional days offered to students varies from school system to school system. Instructional days differ from standard operating days or total possible teaching days in a school year. The latter are well defined by the Alberta School Act (Section 139, p. 60).

In the province of Alberta, the instructional year is not explicitly defined in terms of a prescribed minimum number of instructional days for students, as is the case in some provinces and territories in Canada. This is left to the authority and discretion of each school board. A publication by The Canadian Education Association entitled, "The School Calendar 1980-81" (October, 1980), reports on the opening and closing dates of schools, number of possible teaching days, and the prescribed holidays in all Canadian provinces and territories. It also reports those which have a prescribed minimum number of instructional days required out of the total possible operating days in the school year. The minimum number of instructional days required by the various provinces and territories are shown below. These were calculated by subtracting the maximum allowable number of days authorized by a school board for organization, administration, teacher in-service training, parent-teacher conferences and professional development activities (students not in attendance) from the number of total possible operating days in the 1980-81 school year.

Yukon Territories	- 187
North West Territories	- 190
British Columbia	- 187
Manitoba	- 188
Ontario	- 185
Quebec	- 180
New Brunswick	- 181
Nova Scotia	- 187
Prince Edward Island	- 185
Newfoundland	- 180

The average number of instructional days is 185.

In Alberta, there is no legislated minimum or maximum number of instructional or operating days under the School Act, but 200 days is used as the total possible days in a school year.

Giles et al. (1977) reported that the instructional year in 1969-70 in Alberta varied considerably in length across the province. Seventy-one per cent of the senior high schools had an instructional year of less than 190 days, while 25 per cent had 180 days or less. In the 1975-76 school year, senior high schools reported shorter instructional years with 77 per cent reporting less than 190 days, and 40 per cent having less than 180 days. In 1975-76, cross-provincially, the length of the instructional year varied between 182 and 195 days. On the basis of the above report, one might expect that in 1979-80, the instructional year may even be shorter.

The number of instructional days is dependent upon the Carnegie Unit and the time-credit definition. By definition, a five credit course must receive a minimum of 125 hours of instruction time. This represents approximately one 40-minute period per day, five days per week for each week of the school year. In order to fulfill this requirement, 187.5 days of actual instruction would be required. On the basis of the report by Giles et al. (1977, p. 113) and the concerns expressed by the Regional

Office Coordinators, it would seem that many of our senior high schools could not sustain a rigorous audit of their time-credit relationship. The somewhat liberal interpretation of the time-credit definition and the resulting variations in the number of instructional days can be, in part, attributed to the lack of more specific guidelines concerning the length of the instructional year. It should be noted that the report by Giles et al. (1977, p. 127) included two recommendations:

1. That the Provincial Government define "instructional year" to mean the sum, which must be equal to 180, of all instructional days in a school year.
2. That the Provincial Government define "instructional days" to mean any school day on which a student is expected to be present in a designated classroom, facility or any other location approved by the school board for the purpose of receiving instruction, being evaluated, or for any other reason approved by the board.

Many schools operate with fewer than the required 187.5 instructional days per year. There are various reasons for this, some of which have already been mentioned previously. Some schools, for example, have an extended Christmas vacation lasting almost three weeks, in addition to the regular holidays and allowable school closures. Unforeseen events may also cause a loss of instructional days. The recent Calgary Teachers' Strike is an example of this. The months of June and September were lost. The school year was shortened by four weeks this fall which reduced the number of instructional hours available. The Calgary Public School Board decided to ask the Minister of Education to approve a plan which would divide the remaining year into two equal semesters and that 115 hours of instruction be accepted for five-credit courses instead of the required 125 hours.

Hansard reported the Minister of Education's reply to the Calgary proposal. The Minister ratified a proposal which will allow students in the semester system to complete and receive credits for programs as though there had not been a strike. The Calgary Board of Education was authorized to operate with ten fewer hours of instruction in both the fall and spring semesters. It should be noted that the Calgary Board of Education decided not to extend the school year into the summer nor lengthen the school day in order to compensate for instructional time lost. This represents a significant deviation in the time-credit relationship in that the strict definition of a credit has been given a more flexible interpretation by the Minister of Education. The Minister's decision might be viewed as a precedent-setting one and could provide legitimate grounds for a re-evaluation of the current definition of a credit.

There is sufficient research evidence available that instructional time or the time spent in the study of a subject has little direct relationship to the amount of knowledge gained or student achievement (Husen, 1972). The Ontario Ministry of Education, in its publication, Educational Research Highlights (February, 1980), published a summary report of a study which investigated the relationship between instructional time and academic achievement. The first part of the report consists of an examination of selected research literature from the United Kingdom, United States and Canada, while the second part was based on achievement data on Grade 8 students in Ontario.

Some generalizations derived from the literature review were:

1. Attendance is slightly related to achievement but researchers do not know whether improving attendance will result in higher achievement.

2. The length of the school year, within reasonable limitations, is not clearly related to general achievement scores.

3. Variation in course hours is related to achievement in some subject areas (second language and science) but probably not in some other subject areas. Within limitation, the increasing of time spent for second language improves learning in that subject area without hindering learning in the first language area.

4. Instructional time and instructional method are closely related. Careful manipulation of both can result in significant changes in achievement patterns.

5. In developed western countries, lengthening the years of instruction downwards below the age of seven or upwards above the age of eighteen is not clearly related to overall gains in achievement.

Some results of the Ontario study were:

1. Estimates of engaged time in written English (number of essays written and time spent on homework) proved not to be related to achievement.

Allocated instructional time proved to be related to achievement in French as a second language, geography and mathematics. No positive relationship was found in the cases of reading, language, written English, history, and science.

Despite such research evidence, Warren (1975) reported that there seems to be little disposition on the part of administrators, teachers or parents to remove the time component entirely from the definition of a credit. It seems that some clear statement of an "average time" expectation for a credit would be more realistic and practical and would provide greater flexibility in school organization. A change in wording in the present regulation is all that would be required. It is, therefore, recom-

mended that the time component of a credit be established as an average expectation rather than as a minimum, as it is now stated. Perhaps the time has arrived when the definition of the credit should be re-evaluated and re-stated in terms of an average time expectation.

CHAPTER V

THE FEASIBILITY OF CHALLENGE TESTS

Challenge tests can play an important role in secondary school education as an implicit adjunct to the Carnegie Unit time-credit concept. Embodied in the framework of the Carnegie Unit, challenge tests would offer a practical alternative by providing the much-needed flexibility which is inherently lacking in the definition of a credit. One of the main criticisms of the Carnegie Unit is that it demands rigid, inflexible time-credit requirements.

A search of the literature revealed that no research is available on the use of challenge tests at the high school level. This does not suggest that challenge tests should not be given serious study and consideration with a view to developing such tests in subjects in grades 10, 11 and 12, and possibly in grade 9. Challenge tests would produce positive effects on students in terms of encouragement to master course content, increased aspiration levels and motivation to learn. They can also provide proficiency testing which is necessary to equate past learning with the course content of a subject.

Challenge tests should measure a student's mastery of theoretical course content, cognitive skills and practical skills. They should thus, consist of several components such as: paper and pencil tests, oral examinations and tests for evaluating practical skills and techniques. Some components, such as oral examinations in Second Languages or tests of

practical skills in Industrial or Vocational Education courses could possibly be developed and administered by local school systems or by each high school. However, if a student passed a locally developed test, the principal's recommendation for credits would have to be honoured. Written tests for evaluating course content and cognitive skills should probably be made available through the Department of Education. An important aspect of the challenge test concept is that adequate tests be provided on demand. This could best be done through a central computerized item banking service developed and administered by the Department of Education. Furthermore, in order to ensure quality control and maintain confidentiality, perhaps all aspects of challenge tests should be under the aegis of the Department. Oral examinations and tests for evaluating practical skills could be administered by Regional Office Consultants. For example, if a student wished to challenge a second language, such as French 10 or Ukrainian 20, both of which contain an oral component, the Second Languages Consultant could administer the oral examination. This would also tend to minimize subjectivity in scoring, if the test were administered by a teacher at the local school level.

The introduction of challenge tests would provide students with greater freedom to make decisions and choices about their education. A student could elect to challenge a course at the beginning of a semester and, if successful, be granted credits. He could then register in the second or third level of the sequence without penalty, i.e. loss of credits. On the other hand, a student may elect to challenge a course in the middle of a semester rather than wait until the end of the semester in order to write the final examination.

Certain guidelines, minimum requirements and procedures would need to be developed in order to implement a challenge examination system. These would include such things as:

1. Establishing criteria for eligibility to take the tests.
2. Establishing a minimum competency level, i.e. a passing score.
3. Developing procedures for students wishing to apply for a challenge test, which would also include furnishing evidence of previous preparation or competence.
4. Ensuring that challengers must meet the same standards as regular students, hence, written examinations should be similar to the comprehensive final examinations given in the corresponding courses.

Care should be taken, however, that challenge tests are not exploited in such a way that they will contribute to a form of intellectual elitism. All students should be given equal opportunity to apply for a challenge test.

In Alberta today, challenge tests, of a sort, already exist. These are the grade 12 appeal examinations. Adult or mature students already have the privilege of challenging these tests and using the results as evidence of proficiency. Passing the appeal examinations and meeting the normal requirements (see Appendix B) makes them eligible for the High School Diploma. Grade 12 students may write an appeal examination only if they meet certain requirements of eligibility (Handbook, p. 7). However, there is no provision for students in other grades to write an appeal exam or challenge test when they feel that they already have a certain level of proficiency in a subject or else have obtained it through hard work and application, regardless of the time spent in class.

Before challenge tests can be seriously contemplated, however, certain regulations in the Handbook need to be changed in order to overcome some of the inconsistencies which apparently exist.

The Handbook (p. 32) indicates special provisions for mature students (Appendix B). For example, a mature student may earn senior high school credits by writing an appeal examination in any of the grade 12 core subjects with or without formal course instruction and without holding the required prerequisites. Yet a regular grade 12 student, who is 18 or 19 years of age (legal adult), a status similar to that of a mature student, is required to take 125 hours of instruction in each five-credit subject in grade 12 by virtue of the fact that he is attending high school and receiving regular classroom instruction. The "rules of the game" are changed. One might logically conclude that attending school as a regular high school student incurs a penalty in terms of increased instructional time and subservience to attendance regulations. Might there also be an implication here that increased instructional time is required in high school because instruction may be somewhat inferior to that obtained by the mature student through correspondence courses or extension courses?

It should also be noted that the regular grade 12 student must earn credits in all prerequisite courses through classroom instruction or correspondence courses. However, the mature student who has achieved a standing of 50 per cent or higher on an appeal examination, will automatically be awarded credits in the normal prerequisites to the course completed.

High school students attending accredited private language schools in Alberta also have special privileges which are not available to regular high school students. For example, a minimum of 13 hours of instruction time is required for each credit offered (i.e. a five credit second language course would require only 65 hours). Furthermore, as soon as the student has registered in a high school and has completed the work of the appropriate grade, the principal may recommend credits in a senior high

school second language course. Private language school students generally have had at least six or more years of study in a second language and are not only very fluent in it but are also well advanced in their studies by the time they have completed the first year of regular high school, i.e. grade 10. Very often at the end of grade 10, the principal will recommend that the student be granted the total allowable 15 credits for second language study in high school. Thus, these credits may be granted retroactively or in advance of the grade in which the student is enrolled; a situation not unlike that of granting music credits for private music study.

Regular high school students lack this kind of consideration. This is somewhat of an anomaly which points out the rigidity and inflexibility of the Carnegie Unit and the regulations pertaining to regular high school students. It has already been noted previously that normal prerequisites may be waived by the principal in special cases. However, credits are not granted for courses which have been waived. In view of the above, it would appear that some changes in the present regulations in the Handbook would be desirable in order to give regular high school students some of the privileges presently enjoyed by mature students and private language school students. Such changes would also provide the compatibility necessary to a consideration of the challenge test concept.

The Minister of Education recently announced a new student evaluation policy (Alberta Education, Information Bulletin, 1980). One component of the policy is the introduction of a system of provincially set and marked Comprehensive Examinations at the grade 12 level. These will be tests reflecting the "normal" or "normed" expectations about the nature and extent of information, concepts and skills that a well-motivated and

achieving student should possess upon completion of basic education (i.e. grade 12). Four examinations will be administered twice a year (i.e. once in each semester) in the areas of literacy, history and the social sciences, computation skills and, the physical and biological sciences. Writing of these examinations will be at the option of the student, or of adults. A Comprehensive Education Certificate will be awarded to students who achieve a satisfactory score in the examinations.

Comprehensive Examinations are, in a sense, challenge tests which are available to grade 12 students and adults. The nature of these examinations or the form which they may take is not yet known. If, however, Comprehensive Examinations were designed so as to test curricular objectives and course content in high school subjects and, if the privilege of writing these examinations was extended to grade 10 and 11 students, then challenge tests could become a reality. If, on the other hand, it is not feasible to develop Comprehensive Examinations as challenge tests, then perhaps appeal examinations in the basic core subjects in grades 10 and 11 should be considered as the other alternative.

The Minister also announced the establishment of a Student Evaluation Branch which will develop, administer and score achievement tests, appeal examinations and the Comprehensive Examinations. It would seem that this Branch could also be responsible for the development of challenge tests through a system of computerized item banking. The use of item banks for obtaining adequate tests on demand has considerable potential as a practical alternative to the Carnegie Unit. The number of school subjects which could be accommodated in the early stages of development would probably need to be limited to the core subjects in high school because of the costs involved and the work required to develop a large number of items

for each subject. In the foreseeable future, both the Carnegie Unit and challenge tests could be used jointly in the accreditation of schools and awarding of credits to students. Thus, a valuable service would be rendered to students, teachers and school systems in Alberta.

CONCLUSIONS AND RECOMMENDATIONS

The Carnegie Unit has been used for many years as the basis for high school organization of courses and programs and for assessing student progress through high school to graduation with a high school diploma. This paper has reviewed the origin of the Carnegie Unit concept and its influence on the organization of Alberta secondary schools in terms of the definition of a credit, the awarding of credits on the basis of the number of hours and years a student spends in the study of a subject and the establishment of criteria for the high school diploma. An effort has been made to point out that the current inflexible definition of a credit has resulted in certain variations, ambiguities and inconsistencies in practices in Alberta high schools as well as the effect of such practices on regular high school students. This paper has also examined the feasibility of using challenge tests as a practical adjunct to the Carnegie Unit.

Recommendations

1. That the time component of a credit be defined as an average expectation rather than a minimum as it is now stated in the regulations.
2. That the contents of the Junior-Senior High School Handbook be revised, with particular attention given to mandatory and non-mandatory regulations and the guidelines under Special Circumstances, in order to achieve greater clarification, consistency and elimination of the existing variations related to the time-credit relationship.

3. That the Form A (Secondary School Registration and Continuing Accreditation Document) be revised in order to provide more detailed information concerning program organization and, that more adequate monitoring procedures be developed which will facilitate greater congruency between the program organization shown on the Form A and that which is being implemented at the school level.

4. That the "instructional day" and the "instructional year" be more precisely defined in order to provide for greater consistency in interpretation.

5. That changes be made in the time-credit relationship and the granting of credits so that regular high school students may gain some of the privileges presently being enjoyed by mature students and private language school students.

6. That consideration be given to the feasibility of developing and introducing challenge tests in high school subjects in grades 10, 11 and 12.

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A P P E N D I C E S



MEMORANDUM

EDUCATION

FROM M. R. Fenske
Director
Planning & Research Branch

OUR FILE REFERENCE

YOUR FILE REFERENCE

TO Alberta Education Regional
Office Coordinators:
S. Cymbol N. J. Andruski
C. H. Emard N. Gannon
M. S. Bruce

DATE March 6, 1980

TELEPHONE 427-8225

SUBJECT Credit Unit Questionnaire

The Curriculum, Instruction, and Evaluation Committee of Directors' Council has requested a brief review of variations existing in the standard twenty-five hours of instruction per credit unit. The variations may be of three forms:

- a) those granted at the discretion of the principal within the provisions of the Junior-Senior High School Handbook;
- b) those noted in the Form "A" report and requiring the approval of the regional office coordinator;
- c) variations made locally beyond the discretionary powers of principals and not approved by the regional office coordinator.

We have undertaken an analysis of the handbook to determine the variations allowed at the discretion of the principal. Supplementary to this analysis, we request that coordinators complete the attached questionnaire in order to provide information on both the nature of the variation and criteria used in resolving any issues concerning such variations:

- a) variations which you have approved in the cases where such approval is required--such as double programming--and what criteria were employed in making a decision;
- b) whether you have exercised any control over the nature of the program or the hours allocated in cases where there is a recommended, but not required, time element--such as Junior High School Group A options--and the criteria applied in resolving these matters;
- c) whether you or your staff have noted, through school visits or other means, any unapproved variations, and what action you have taken in such cases.

Receipt of this information is requested by March 14, 1980 in order to meet the requirements of the Associate Deputy Minister for Instruction.

M. R. Fenske

MRF/caw

cc All CIE Committee Members

Attachment

Questionnaire to Regional Office Coordinators
Re: Variations Approved in Time Credit Relationships (FORM A APPROVAL)

March 6, 1980

Please complete and return to Dr. M. R. Fenske,
Director, Planning and Research Branch, by
March 14, 1980.

[Note: Although not commonly referred to as part of the credit system, for purposes of this questionnaire, please treat junior high school course hours as though they are part of a credit system.]

1. JUNIOR HIGH CORE SUBJECTS: REGULATORY PROVISION, PAGE 9, SECTION 13 OF HANDBOOK

1.1 Are there any cases of Junior High Schools not offering the allocated minimum time for one or more of the required core subjects of Language Arts, Social Studies, Mathematics, Science, Physical Education and Health, or Grade 9 Guidance?

YES ____ NO ____

1.2 If YES, please give:

a) Estimated percentage of schools involved.

b) Subjects involved, listed in descending order of frequency.

1.3 What steps are taken in such cases?

1.4 Has the action been taken in the light of specified criteria or guidelines which you have developed, or on an ad hoc basis?

CRITERIA/GUIDELINES ____ AD HOC BASIS ____

1.5 If action has been taken according to criteria or guidelines, please indicate these.

2. JUNIOR HIGH OPTIONS

Pages 9 to 10 of the handbook indicate that the recommended minimum time allotment for Group A options should be 75 hours each and for Group B options, 50 hours each.

2.1 Have you found on Form As departures for the 75 and 50 hours provisions?

YES ____ NO ____

2.2 If YES, then please indicate:

- a) Estimated percentage of schools involved.
- b) Subjects involved, listed in descending order of frequency.
- c) Any typical variation from the recommended time.

2.3 Have you taken any action relative to any of these departures?

YES ____ NO ____

2.4 If YES, please specify nature of the action relative to:

GROUP A -

GROUP B -

2.5 Has the action been undertaken according to specified criteria or guidelines you have developed, or on an ad hoc basis?

CRITERIA/GUIDELINES ____ AD HOC BASIS ____

2.6 If action has been taken according to criteria or guidelines, please indicate these.

3. SENIOR HIGH TIME CREDIT RELATIONSHIP: REGULATORY PROVISION, PAGES 13-16, 21, 23, 24-27 OF HANDBOOK

Regulations in the handbook state that 25 hours per credit be scheduled for purposes of instruction, examinations and other student activities directly related to the course for which credit is to be granted (no professional development, convention, or other non-instructional days), with the exceptions noted in the handbook concerning 3 credit extension, correspondence school, private study, music, and special project courses. More than minimum time may be provided for any course.

Page 14, section 4 of the handbook notes "Special Circumstances" for schools with low total enrolments, low enrolments in some courses, or cases where the full-time teacher equivalents to grades are less than one. Double programming or reduction of time allocations per credit might be permitted in special circumstances.

3.1 Do you exercise any authority over such "special circumstances" when found on Form As?

YES _____ NO _____

3.2 If YES, in what cases have you intervened?

3.3 In cases not involving strict adherence to regulatory provisions in the handbook, do you intervene according to criteria or guidelines you have developed, or on an ad hoc basis?

CRITERIA/GUIDELINES _____ AD HOC BASIS _____

3.4 If action has been taken according to criteria or guidelines, please specify these.

4.1 Are these program variations of which you are aware by some means but which have not been submitted for approval on the Form A?

YES ____ NO ____

4.2 If YES, please specify the nature of the variations discovered.

4.3 In the cases specified, what sort of action, if any, have you taken?

4.4 Has the action been taken in light of any criteria or guidelines which you have set, or on an ad hoc basis?

CRITERIA/GUIDELINES ____ AD HOC BASIS ____

4.5 If action has been taken according to criteria or guidelines, please specify these.

5. ADDITIONAL CONCERNS

- 5.1 If there are additional concerns you would like to raise concerning the time-credit relationship, please use the space below to describe these.

APPENDIX B

G. SPECIAL PROVISIONS FOR MATURE STUDENTS

1. A mature student is one who is nineteen years of age or over, provided that after having reached the age of eighteen years he or she has left school and remained out of school for at least eight consecutive months.
2. Notwithstanding Number 1 above, mature student status may be granted to a student who is seventeen or eighteen years of age, if in the opinion of the principal it is in the student's best interest to do so.
3. In instances where there is doubt or dispute as to whether or not mature student status should be granted, or where special or unusual circumstances appear to exist, cases may be submitted for consideration to the Special Cases Committee of Alberta Education (see p. 34).
4. Mature students enrolled in credit courses must be registered with the Student Evaluation and Data Processing Services Branch of Alberta Education.
5. A mature student may earn senior high school credits after successfully completing:
 - a. courses offered in a regular accredited school;
 - b. courses offered under Section 15 of the School Grants Regulations, dealing with Extension Programs;
 - c. courses offered by the Alberta Correspondence School;
 - d. an appeal examination conducted by Alberta Education with or without formal course instruction. (See p. 18 for list of examination subjects.)
6. A mature student is eligible to enroll in any course at the senior high school level or to write an appeal examination without holding the required prerequisite courses.
7. A mature student who has achieved, by any of the alternatives noted in 5 above, a standing of 50% or higher in a senior high school course will automatically be awarded credits in the normal prerequisite(s) to the course(s) completed.
8. Mature students are eligible to receive a High School Diploma upon completing the normal requirements. They are not, however, required to complete Physical Education.

NOTE: Many school boards offer comprehensive programs for mature students in both credit and non-credit areas. Interested mature students should consult with their school board for details on such programs.

